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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/054,284

11/13/2001

Markus Andreasson

66217

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06/13/2005

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EXAMINER

KASSA, YOSEF

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/054,284

Applicant(s)

ANDREASSON ET AL.

Examiner

YOSEF KASSA

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Arguments

1. Applicant's arguments see the remark on page 9-17, filed on Dec. 22, 2004, with respect to rejection(s) of claims 1-29 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made on claims 1-29 of Nakabayashi U.S. Patent 5,675,672, and further in view of Lotspiech U.S. Patent 4,271,476.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9, 11-17 and 24-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakabayashi (U.S. Patent 5,675,672).

With regard to claim 1, Nakabayashi discloses a processing device (OCR in Fig. 1) for converting the information in each of said images to a coded representation (see col. 4, lines 34-37);

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a comparison device for comparing the coded representation of said images for determining an overlap position between the images (see col. 5, lines 35-39);

an assembling device (aligner 20 in Fig. 1) including a memory for assembling said compared coded representation to form a composite representation in said memory (see col. 5, lines 39-60).

With regard to claim 2, Nakabayashi discloses coded representation is a character code (see col. 4, lines 34-37).

With regard to claim 3, Nakabayashi discloses wherein said coded representation includes a division of the information inside borders, such as rectangles, each comprising portions of the information inside borders, each comprising portions of the information (see col. 4, lines 11-20).

With regard to claim 4, Nakabayashi discloses wherein said borders include word included in said information (see col. 4, lines 1-20).

With regard to claim 5, Nakabayashi discloses further including a character recognition device for processing the composite representation and converting it to character code format (see Fig. 1, item 12 converting the input data into character code format).

Claim 6 is similarly analyzed and rejected the same as claim 5.

With regard to claim 7, Nakabayashi discloses further including a determining device for determining structures in each of said images (see col. 4, lines 1-20).

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Claim 8 is similarly analyzed and rejected the same as claim 7.

With regard to claim 9, Nakabayshi discloses wherein said determining device is adapted to identify text line directions (see col. 4, lines 21-33).

Claim 11 is similarly analyzed and rejected the same as claim 1.

Claims 12 and 13 are similarly analyzed and rejected the same as claims 2 and 3.

With regard to claim 14, Nakabayshi discloses wherein rectangles include words included in said information (see Figs. 4-6, comprises rectangles shaped words).

Claims 15 and 16 are similarly analyzed and rejected the same as claim 5.

Claim 17 is similarly analyzed and rejected the same as claim 7.

With regard to claim 24, Nakabayshi discloses wherein the processing device is adapted convert coherent pieces of the information in said images to a coded representation of the extent of said pieces of information in at least one dimension and wherein the comparison device is adapted to compare the extent of the coherent pieces of information in said images (see col. 4, lines 59-67).

With regard to claim 25, Nakabayshi discloses wherein a coherent piece of information is selected from the group of a symbol, a picture and a word (see col. 4, lines 21-29).

With regard to claim 26, Nakabayshi discloses wherein the coherent pieces of information are words and wherein the comparison device is adapted to compare the length of the words in said images (see col. 4, lines 59-67).

With regard to claim 27, Nakabayshi discloses wherein the step of converting comprises converting coherent pieces of the information in said images to a coded representation of the extent of said pieces of information in at least one dimension and wherein the step of comparing comprises comparing the extent of the coherent pieces of information in said images (see col. 4, lines 34-37 and col. 4, lines 59-67).

Claims 28 and 29 are similarly analyzed and rejected the same as claims 25 and 26.

3. Claims 10, 18, 19 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakabayashi (U.S. Patent 5,675,672) and further in view of Saitoh (U.S. Patent 5,220,621).

With regard to claim 10, Nakabayashi is silent about wherein the determining device is adapted to identify direction of lines and text line directions utilizing Hough transformation. However, at the same field of endeavor, Saitoh teaches this feature (see col. 2, lines 31-45). At the time of the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the teaching of Saitoh's Hough transformation process into Nakabayashi's system. The suggestion/motivation for doing so would have been to provide characters recognizing system and method using Hough transform. Therefore, it would have been obvious to combine Nakabayashi and Saitoh to obtain the invention as specified in claim 10.

Claims 20-22 are similarly analyzed and rejected the same as claim 10.

Claims 18 and 19 are similarly analyzed and rejected the same as claim 10.

Claim Rejections - 35 USC § 101

4. Claim 23 is rejected under 35 U.S.C. 101 because the claimed invention of is directed to non-statutory subject matter. Claim 23 recites the limitation " a computer program for carrying out the method..." which are non-statutory. A program is functional descriptive material, and is only statutory when embodied in a computer readable medium. Applicant may overcome this rejection by rewriting the limitation "a program product for making a computer execute image processing" as "A computer medium or a computer readable medium storing or comprising...." (See MPEP 2106).

Other Prior Art Cited

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. (6,516,097) to Pritt disclose image segmentation system.

US Patent No. (5,770,841) to Moed et al disclose system and method for reading package information.

US Patent No. (5,563,403) to Bessho et al discloses method and apparatus for detection of a skew angle of...

US Patent No. (5,583,956) to Aghajan et al discloses estimation of skew angle in text image.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSEF KASSA whose telephone number is (703) 306-5918. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH MEHTA can be reached on (703) 308-5246. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communication and (703) 872-9306 for after Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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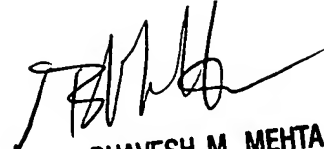
system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PATENT EXAMINER

Yosef Kassa



06/08/05.



BHAVESH M. MEHTA
SUPERVISORY PATENT EXAMINER
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